

REMARKS

The Official Action dated May 3, 2004, has been carefully reviewed and the following remarks are presented in response thereto. Claims 1 through 12 have been provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of U.S. Patent No. 6,615,096. Claims 1 through 12 further stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,381,556 issued to Kazemi et al.

Double Patenting

The Official Action dated May 3, 2004 states that a timely filed terminal disclaimer in compliance with 37 CFR 1.321 may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with the present application. The present application and U.S. Patent No. 6,615,096 have both been assigned to NCR Corporation.

Enclosed herewith is a TERMINAL DISCLAIMER TO OBVIATE A DOUBLE PATENTING REJECTION OVER A PRIOR PATENT, USPTO form PTO/SB/26, signed by the attorney of record in the present application.

Claim Rejections – 35 U.S.C. §102

Applicant respectfully traverses the rejection under 35 U.S.C. §102(e) of each of the claims of the present application.

The present application describes and claims a system and method that stores product manufacturing parameters within a database, analyzes the stored product manufacturing parameters to define one or more normal parameter subsets, and detects manufacturing parameters that are not contained within a normal subset in order to identify manufacturing anomalies. The present

application includes two independent claims, claims 1 and 7. The remaining claims in the present application depend from claim 1 or claim 7. Independent method claim 1 recites:

1. A method for identifying manufacturing anomalies in a manufacturing system comprising a plurality of products which are manufactured with a plurality of *manufacturing parameters*, the method comprising the steps of

- storing the plurality of *manufacturing parameters* in a data warehouse;
- applying a data mining program to perform the steps of:
- analyzing the stored *manufacturing parameters* to define a first normal manufacturing parameter subset;
- detecting at least one of the plurality of *manufacturing parameters* that is excluded from the first normal subset; and
- reporting the at least one detected *manufacturing parameter*. (emphasis added)

Independent apparatus claim 7 recites:

7. A system for identifying manufacturing anomalies in a manufacturing system comprising a plurality of products which are manufactured with a plurality of *manufacturing parameters*, comprising:

- a data warehouse for storing the plurality of *manufacturing parameters*;
- a data mining program applied to the data warehouse for analyzing the stored *manufacturing parameters* to define a first normal manufacturing parameter subset and detecting at least one of the plurality of *manufacturing parameters* that is excluded from the first normal subset; and
- a reporting means for reporting the at least one detected *manufacturing parameter*. (emphasis added)

It is believed that the invention as recited in each one of the claims of the present application differs from the system taught in Kazemi et al. Kamezi et al. discloses a method and system which analyzes raw data derived from a manufacturing control facility. The cited reference describes "raw data" as including data describing pass/fail performance of circuit boards associated with a process and individual assemblers, i.e., test data. In contrast, the method and system recited in claims 1 and 7, respectively, of the present application stores product manufacturing parameters within a database, analyzes the stored product manufacturing parameters to define one or more normal parameter subsets, and detects manufacturing parameters that are not contained within a normal subset in order to identify manufacturing anomalies.

The present Official Action erroneously equates Applicant's manufacturing parameters with the "raw data" described in Kazemi et al. These two elements are not equivalent. The present application includes as examples of manufacturing parameters: the tolerance of a lot of resistors, the threshold of a lot of resistors, the capacitance of a lot of capacitors, the reactance of a lot of capacitors, the supplier from which a lot originated, the shipping method used for transporting a lot of components, and the time of year that a lot of components was manufactured. Clearly, the shipping method used for transporting a lot of components, or the time of year that a lot of components was manufactured cannot be considered raw data as described in the cited reference to Kazemi et al.

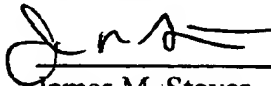
The present Official Action uses the terms "raw data" and "manufacturing parameters" interchangeable in discussing Kamezi et al, yet nowhere in Kamezi et al. is the term "manufacturing parameters" used. The terms "performance parameters" and "report parameters" do appear in Kazemi et al., but their use and description clearly differ from the "manufacturing parameters" described in the present application. Kamezi et al also describes the setting of various parameters

to define data or test limits. This use of the term "parameters" also clearly differs from the "manufacturing parameters" described in the present application. It is not seen that any equivalence to the "manufacturing parameters" described in the present application is described in Kazemi et al.

It is believed that the claims of the present application are patentable over the cited reference to Kazemi et al. Kamezi et al does not teach or suggest a system that stores product manufacturing parameters within a database, analyzes the stored product manufacturing parameters to define one or more normal parameter subsets, and detects manufacturing parameters that are not contained within a normal subset in order to identify manufacturing anomalies.

Review and reconsideration of the present application is respectfully requested.

Respectfully submitted,



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